#### **ATTACHMENT 1**

#### **DUST CONTROL PLAN FORMS**

- 1. Dust Control Plan (form DCP 01)
- 2. Dust Control Plan Checklist (form DCP 02)
- 3. Control Measure Identification (form DCP 03)
- 4. Owner's Designee (form DCP 04)
- 5. Dust Control Plan Modification (form DCP 05)
- 6. Dust Palliative Information (form DCP 06)
- 7. Certificate of Project Completion (form DCP 07)
- 8. Modification of Dust Control Plan Transfer of Plan and/or Change of Property Owner (form DCP 08)
- 9. Request for Hearing: Appeal of Decision (form DCP 09)
- 10. Record of Daily Dust Control for Construction Activities (form DCP 10)

#### INSTRUCTION SHEET FOR A DUST CONTROL PLAN

- 1. Complete the Dust Control Plan (form DCP 01) and any additional forms required for completion and attachment. As a minimum, the Dust Control Plan must include the forms and maps described on this page.
- 2. Use the **Dust Control Plan Checklist** (DCP 02) to determine which Construction Best Management Practices (BMPs) are to be included in the Dust Control Plan. The checklist divides the construction project into seven (7) groups based on typical project stages: 1) Offsite Utility and Street Development, 2) Site Preparation and Earthwork, 3) Forms Construction and Slab Pouring, 4) Sub grade Preparation and Paving, 5) Building, 6) Landscaping and Activities for Every Stage. Mark the box next to all Project Activities that are applicable to your project.
- 3. Complete the Control Measure Identification form (DCP 03). Use the Project Activities Checklist (DCP 02) to itemize project stages and activities. Select and list BMP Control Measures to be used to fulfill each requirement for the Project Activity on the Control Measure Identification form. If available, select at least one Control Measure corresponding to the identified soil particulate emission potential (PEP). See Control Measures Identification Instruction page of this section for detailed instructions.
- 4. Provide a map showing the vicinity of the project, clearly identifying the closest major cross streets or other landmarks and the project location. Label this map "Vicinity Map." Required map size is 8 ½ x 11 inches. For projects less than 10 acres, where the required Assessor Parcel Maps listed below indicates known cross streets, this map is not required.
- 5. Provide an 8 ½ x 11 inch **Assessor Parcel Map** for the property(s) on which the project will be occurring. Outline or highlight the affected parcels. Assessor Parcel Maps may be obtained from the Nye County Assessor's Office. Projects that entail installation or construction of linear features such as roads, pipelines or other utilities that border or cross more than two Assessor's Parcel Maps are only required to provide an Assessor's Parcel Map(s) for those areas that show the material and equipment staging areas; but a detailed vicinity map adequately depicting the entire project area, including staging areas, must be provided.
- 6. Submit Dust Control Plan and fee to Nye County. Dust Control Plans will be accepted Monday through Friday, 8:00 a.m. to 4:30 p.m., at the address specified in the Introduction section of the Nye County Dust Management Handbook (page1). Applicable fees are described in DCP 06 (Dust Control Plan Fees) of the Nye County Dust Management Handbook.

#### **DUST CONTROL PLAN**

Construction activities include but are not limited to: cut and fill, site cleanup, staging areas, stockpiles, surface grading, trenching, landscaping and construction.

- ◆ A Dust Control Plan is required for all projects disturbing more than 0.5 acre. Attach a copy of the Dust Control Plan (DCP 01) including maps and required supplemental forms and documents.
- ♦ A copy of the submitted Dust Control Plan including all maps must be on-site prior to commencing construction activity.
- ♦ A Dust Control Plan Sign must be erected on-site prior to commencing construction activity.
- Owner/Operators are responsible for dust control 24 hours a day, 7 days a week until a Certificate of Project Completion is submitted by the Owner/Operator and reviewed by a Code Enforcement Officer.

Please print in ink or type. Blank spaces must be completed for the application to be processed. If not applicable, enter N/A.

1.	Project Name:			
2.	Dust Control Plan Filing (check one):	☐ New	Renewal	
3.	Owner/Operator:			
	☐ Property Owner ☐ Developer	□ P	rime Contractor	Other
	Name:			
	Address:			
	City:	State:	Zip:	
	Telephone:	Fax:		
	E-mail Address:			
4.	Property Owner: (if applicant is NOT the F		•	
	Name:			
	Address:			
	City:	State:	Zip:	
	Telephone:	Fax:		

5.	Project Address or Location:						
	Address:		City:				
	Nearest major cross-streets:						
	Township(s):	Range(s):_		Section(s):			
	Assessor's Parcel number(s) (Atta	ıch map):					
6.	Point of Contact for dust con VIOLATION should be sent if ne		s and to who	om a NOTICE O	F ALLEGED		
	Name:						
	Company:						
	Address:						
	City:		State:	Zip:			
	Telephone:	Ext:	Fax:_				
	Cell/Pager:	Afte	r Hours Phone	e:			
7.	On-site Superintendent/Supervisor/Foreman contact:						
	Name:		Company:				
	On-site phone:		Cellular/Pag	er:			
8.	Project Summary (check all that	apply):					
	Project Timeline:						
	☐ New Project ☐ Existing/Ong	going Project					
	Anticipated Start Date:		Completi	ion Date:			
	Project Description:						
					_		
	Project Acreage: ac	cres (rounded	d to the neares	st 0.1 acre)			
	(All land to be disturbed must be unpaved access roads, stockpile,		•	ge: project site, ne	ew or existing		
	Water source: Hydrant with Jor Stand tanks	nes Valve	Fire hose Ponds	☐ Water trucks ☐ Other:	☐ Well		

12/04

9.	Project Soil "Particulate Emission Potential":
	PEP is determined using generalized PEP determination map included in the Dust Management Handbook.
	PEP for this project is determined to be:
	☐ High ☐ Low
9.	Attach completed Dust Control Plan
	Attach a Dust Control Plan Checklist (Form # DCP 02), Control Measure Identification (a many copies of Form # DCP 03 as needed), and applicable maps.

#### 10. NCPD Notification of Project Completion:

Nye County must be notified within 20 working days of the completion of the project (Certificate of Project Completion (Form # DCP 07).

The signatory on this Dust Control Plan shall constitute agreement by the Owner/Operator to be the person with authority to enforce compliance by all contractors and subcontractors with the Dust Management Handbook, Dust Control Measures, Dust Control Plan, any Plan supplements, and Chapter 15.28 of the Nye County Dust Control Ordinance.

It is a condition of the reviewed Plan required by the Dust Management Handbook or pursuant to any local ordinance for the holder of the Plan to agree to allow inspection of the premises to which the Plan relates by any authorized officer of Nye County at any time during the holder's hours of operation without prior notice. This condition must be stated on each application form and reviewed Plan.

OWNER/OPERA	TOR (AGENT) SIGN	ATURE	DATE		
PF	RINTED NAME		TITLE AND COMPANY NAME		
Dust Control Plar	completed by, if not	completed by signator	ory (Please Print):		
	Name		Phone Number, ext.		
FOR Nye County	/ USE ONLY				
PLAN NUMBER			JED BY		
DATE PAID	_ \$ AMOUNT	CHECK #	COMPANY NAME		
RECEIVED BY			BALANCE DUE		
NYE COUNTY RE	/IEW:		DATE:		
		DE:	DATE:		
TO:		NE	<i>D/</i> (1 L		

#### **DUST CONTROL PLAN CHECKLIST**

Instructions: In each Stage column, place a mark in the box in the Project Activity row for each activity that will occur in your project. Refer to the Best Management Practices (BMP) for dust control in the Nye County Dust Management Handbook for a complete list and descriptions.

If additional soil disturbing activities are to be included in a project stage, include them as "Other" and provide a description.

If a stage is not applicable to your project mark the box in the "Stage Not Applicable" row.

If an activity is applicable to all stages of your project, for example BMP 04 Disturbed Soil, mark the box in the "Activities for Every Stage" column.

Project Name:				DUST CO		CONTR	ONTROL PLAN CHECKLIST		
mittee Name:				_			c	Stage	
		Activ	ities for Every	Stage Str. Str. Str. Str. Str. Str. Str. Str.	Soft John and Later House	Subdis Subdis			scaling
ВМР	Project Activity		1	2	3	4	5	6	ĺ
	Stage Not Applicable								
01	Backfilling								
02	Clearing & Grubbing								
03	Cut and/or Fill								
04	Disturbed Soil								
05	Disturbed Land - Long Term Stabilization								
06	Dust Suppressants - Selection and Use								
07	Importing/Exporting Materials								
08	Landscaping								
09	Paving/Subgrade Preparation								
10	Staging Areas								
11	Stockpiles								
12	Trackout Prevention and Cleanup								
13	Traffic - Unpaved Routes and Parking								
14	Trenching								
15	Truck Loading								
	Other (include description below)								]
				1					

12/04

#### Control Measure Identification

#### Instructions:

- 1. Control Measures must be chosen for each Project Activity marked on the Project Activities Checklist (DCP 02). Make as many copies of DCP 03 as needed, to list them all.
- 2. Control Requirements and Control Measures are listed in Best Management Practices section of the Construction Activities Dust Management Handbook.
- 3. On the "Project Activity:" line enter the name of each Activity identified from the Project Activities Checklist then on the "BMP #:" line, enter the corresponding BMP #, these are found on pages 19 through 35, of the Nye County Dust Management Handbook.
- 4. Check the box that indicates what stage(s) of your project this **Project Activity's** Control Measures will apply to. If a Project Activity will have different Control Measures in different stages, repeat steps 2-5 as needed, do not indicate the same stage on more than one entry for one type of Project Activity.
- 5. Select and list all BMP Control Measures to be used to fulfill each requirement for each Project Activity, enter the Control Measure number and an abbreviated description on the form. If a Requirement does not apply to the Project Activity, briefly explain the reason on a separate sheet to be referenced on and attached to form DCP 03.
- 6. If listed, you must select at least one Control Measure corresponding to the identified soil Particulate Emission Potential (PEP) for your site. These are abbreviated as "L:" for Low, and "H:" for High, on the BMP pages. If you select Contingency measures they must be denoted with a mark in the check box.
- 7. Recommendations are included for some Project Activities. If applied, these suggestions may reduce the amount of additives and water required to effectively prevent fugitive dust.

An example is provided below.

$\overline{}$			$\sim$	
ப	$r \sim$	IOOt	C. † つ	des:
	,	15.1	งาเต	UC.5

ALL = Activities for Every Stage (1) = Offsite Utility and Street Development (2) = Site Preparation and Earthwork (3) = Forms Construction and Slab Pouring

(4) = Sub grade Preparation and Paving (5) = Building(6) = Landscaping

#### **EXAMPLE:**

#### **Control Measure Identification**

Pro	oject Activity:	Backfilling			BN	MP #:	01
Sta	age(s) (Check	all that apply for	this Proiect Act	ivitv):			
	ALL		⊠ (3) □	(4)	(5)	(6)	
	Control I	Measure # <u>01-1</u> D	escription: <u>Stabi</u>	lize material	with water		
	Control I	Measure # <u>01-5</u> D	escription: <u>Dedic</u>	cate large ho	se		
	Control I	Measure # <u>01-6</u> D	escription: <u>Stabi</u>	lize with wat	er upon com	<u>pletion</u>	
	Control I	Measure # Descri	ption:_				
Contingency	□ Control I	Measure # <u>01-2</u> D	escription: <u>Wate</u>	r backfill with	h tackifier		
Measure:							

#### **Control Measure Identification**

(Make additional copies of this page as necessary)

#### **STAGE IDENTIFICATION:**

<b>(2)</b> = Site	vities for Every Stag e Preparation and Ea b grade Preparation	arthwork	` '	ite Utilities anns Construction	on and Slab F	•
Project Activi					BMP #	<i>‡</i> :
Stage(s) ( ALL	Check all that apply t			(4)	(5)	(6)
	Control Measure #	De	escription:			
	Control Measure #					
	Control Measure #					
Contingency	Control Measure #	De	escription:			
Measure:	Control Measure #	De	escription:			
Project Activi	ty:				BMP #	<b>#</b> :
Stage(s) (	Check all that apply t	(2)	(3)	(4)	(5)	(6)
	Control Measure #					
	Control Measure #					
	Control Measure #					
Contingency	Control Measure #					
Measure:	Control Measure #	De	escription:			
Project Activi	ty:				BMP #	<i>‡</i> :
	• •	(2)	(3)	(4)		(6)
	Control Measure #		-			
	Control Measure #					
	Control Measure #		="			
Contingency	Control Measure #					
Measure:	Control Measure #	De	escription:			
Project Activi					BMP #	<b>#</b> :
Stage(s) (		(2)	(3)	(4)	` ,	(6)
	Control Measure #					
	Control Measure #					
	Control Measure #					
Contingency	Control Measure #		•			
Measure:	Control Measure #	De	escription:			

## OWNER'S DESIGNEE FOR DUST CONTROL PLAN FOR CONSTRUCTION ACTIVITIES (Must be notarized)

An Excavation / Encroachment / Offsite permit for government owned land may be submitted in lieu of this form.

1.DESIGNEE INFORMATION:			
Designee:			
Address:			
City:		State:	ZIP:
Phone:	Ext:	Fax:	
2. PROPERTY OWNERS INFORMA	ATION:		☐ Right of Way Holder
Name:			
Address:			
City:		State:	ZIP:
Phone:	Ext:	Fax:	
Major Cross Streets:	description of location :		
Major Cross Streets:  I hereby authorize the person listed the requirements of the Dust Contro is closed in accordance with Nye Cothe contractor(s), subcontractor(s), and comply with the "Conditions of Dust Control Plan for Construction A	Asse as my designee to act of Plan. The Designee is bunty Ordinances. The and all other persons a Plan". They have full	essor Parce on my bel is responsi e Designee essociated authorizati	el Map #:
I hereby authorize the person listed the requirements of the Dust Contro is closed in accordance with Nye Co the contractor(s), subcontractor(s), a and comply with the "Conditions of	Asse as my designee to act of Plan. The Designee is bunty Ordinances. The and all other persons a Plan". They have full	essor Parce on my bel is responsi e Designee essociated authorizati	el Map #:
I hereby authorize the person listed the requirements of the Dust Contro is closed in accordance with Nye Cothe contractor(s), subcontractor(s), and comply with the "Conditions of Dust Control Plan for Construction A	Asse as my designee to act of Plan. The Designee is bunty Ordinances. The and all other persons a Plan". They have full Activities for my propert	essor Parce on my bel is responsi e Designee essociated authorizati y.	el Map #:

#### APPLICATION FOR DUST CONTROL PLAN MODIFICATION

Submit applicable fee per DCP 06 (Dust Control Plan Fees) of the Nye County Dust Management Handbook

1.	GENERAL INFORMATION: Plan Number:
	Owner/Operator:
	Project Name:
	Project Address/Location:
2.	IS MODIFICATION REQUESTED AS A RESULT OF A CORRECTIVE ACTION ORDER?
	□Yes □No
3.	INFORMATION TO BE MODIFIED:
	Control/Contingency Measures and/or Stages: (check all stages to be modified)
	<ul> <li>☐ Activities for Every Stage</li> <li>☐ Site Preparation and Earthwork</li> <li>☐ Subgrade Preparation and Paving</li> <li>☐ Offsite Utility and Street Development</li> <li>☐ Forms Construction and Slab Pouring</li> <li>☐ Building</li> <li>☐ Landscaping</li> </ul>
	Attach modified Dust Control Plan Checklist (DCP 02) and Control Measure Identification (DCP 03) forms for additional activities.
	Project Acreage:
	Acreage to be added: Acreage to be removed: Attach a revised map showing the originally permitted area and the area to be added/removed. Attach Owners Designee (DCP 04) form(s) for any additional parcel(s) to be added.
	Contact Information:
	☐ Point of Contact ☐ On-site Contact
	Attach current information.
	Other:
	Attach modifications and/or current information.
4.	SUBMITTED BY:
-	Signature: Date:
E	Name: Company Name/Title:
ე.	REVIEWED BY:  Nye County:  Date:

#### DUST PALLIATIVE INFORMATION

1.	DUST CONTROL PLAN INFORMATION: (if applicable)
	Plan Number:
	Owner/Operator:
	Project Name:
2.	DUST PALLIATIVE INFORMATION:
	Project Address/Location:
	Date of Application: Acreage or Square Footage stabilized:
	Product Name of Dust Palliative:
	Type of Dust Palliative:
	Dilution Rate: Application Rate:
	Method of Application (Topical/Blended):
	☐ Traffic ☐ Non-Traffic Equipment Used:
3.	APPLICATOR INFORMATION:
	Company:
	Address:
	Contact Name: Nevada Contractor's License #:
	Phone Number: FAX Number:
	Is there a warrantee on services provided?   Yes  No
	If yes, terms of warrantee:
	If no, how long is the Dust Palliative expected to be effective:
	Signature of Applicator: Date:
4.	SUBMITTED BY:
	Signature: Date:
	Name:
	Company Name/Title:

#### CERTIFICATE OF PROJECT COMPLETION 1. DUST CONTROL PLAN INFORMATION: Plan Number: Owner/Operator:\_\_\_\_\_ Project Name:\_\_\_\_\_ Project Address/Location: 2. CLOSURE INFORMATION: **Owner/Operator Statement** I verify no further soil disturbing construction activities will occur at the above referenced location. All project soils designated in the Dust Control Plan have been permanently stabilized by the following method(s) (Check all that apply): Buildings Landscaping ☐ Paving Application of gravel cover Application of dust palliative <1/4 acre disturbed soil remains</li> Other method (describe): I further verify that this project has not created any emission units that require an Air Quality Operating Permit (issued by NDEP). Owner/Operator Signature:\_\_\_\_\_\_ Date:\_\_\_\_\_ Request return fax with inspection results? No Yes, Fax #:\_\_\_\_\_\_ Nye County use only

	tion Results ection by a Nye County Code Enforcement Officer has been perfo	ormed with the following				
results:						
	Construction has ceased and the entire site has been adequestabilization (PASS)	uately treated for long-term				
	Construction has ceased, but the site has not been adeque stabilization in certain areas (FAIL)	ately treated for long-term				
	Construction has ceased, but the site has not been adequately stabilization (FAIL)	treated for long-term				
Note	res:	_				
Code E	Code Enforcement Officer: Date:					

## MODIFICATION OF DUST CONTROL PLAN TRANSFER OF PLAN AND/OR CHANGE OF PROPERTY OWNER

Please print in ink or type. Blank spaces must be completed for the application to be processed. If not applicable, enter N/A.

1.	(mark all that apply) This application is for: Transfe				
	∐ Change	of Property Ownership			
2.	Plan Number:			_	
	Project Name:				
3.	Current Permit Holder:				
	Current Property Owner:			_	
4.	New Owner/Operator (if applicable) (if new Owner/Operator is NOT the Prowner is required, See Attachment 1: I	operty Owner, Owner's Designee Dust Control Plan Forms)		-	
	☐ Property Owner ☐ Develope		ther	_	
	Name:			_	
	Address:			_	
	City:	State:	Zip:	_	
	Telephone:	Fax:		_	
	E-mail Address:			_	
5.	New Property Owner (if applicable): (if new Property Owner is NOT the Permittee, Owner's Designee form DCP 04 from new property owner is required, See Attachment 1: Dust Control Plan Forms)				
	Name:				
	Address:				
	City:	State:	Zip:		
	Telephone:	Fax:			
6.	Point of Contact for dust control matters and to whom a NOTICE OF VIOLATION should be sent if necessary (if changed from current Plan):				
	Name:				
	Company:		_	_	
	Address:				

6.	Point of Contact (continued):					
	City:	State:		Zip:		
	Telephone:	_ Ext:	Fax:	_		
	Cell/Pager:	_ After Hour	s Phone:	_		
7.	On-site Superintendent/Supervisor/Foreman contact (if changed from current Plan):					
	Name:	Company:				
	On-site phone: Cellular/Pager:					
Th un	napter 15.28 of the Nye County Dust Con ne signatory further stipulates that nderstood the existing Dust Control Pl conditions and requirements of that F	by signing an and asso	this application			
It i to to ho	is a condition of the reviewed Plan recany local ordinance for the holder of which the Plan relates by any autholder's hours of operation without proplication form and reviewed Plan.	quired by the the Plan to orized office	agree to allow er of Nye Cour	inspection of the premises		
Ō۱	wner/Operator (AGENT) SIGNATUR	E		PRINTED NAME		
	DATE	TITL	E AND COMP	ANY NAME		

1. GE		ION			
1. GENERAL INFORMATION: Plan Number:					
Ow	wner/Operator:				
Pro	oject Name:				
Pro	oject Address/Location:				
NO	DAV #: Date of Issue:				
Nat	ature of Alleged Violation:				
 2. PU	URPOSE OF REQUESTED HEARING:				
	Contest the Facts Alleged Contest the Penalty As	ssessed			
Pro	rovide a Summary Explanation for Hearing Request (attach additional she	eets as needed):			
Ny	lye County use only				
	Date Request Received By Nye County:				
Ny	lye County Representative Receiving Application:				
<ul> <li>☐ Hearing request received within time limits established in the Nye Cour Management Handbook. Hearing Scheduled for:</li> <li>☐ Hearing request denied for failure to submit form within time limits established in County Dust Management Handbook.</li> <li>☐ Other:</li> </ul>					
	Notes:				

#### **NYE COUNTY**

Forward this form to the address specified in the Introduction section (page 1) of the Nye County Dust Management Handbook

#### RECORD OF DAILY DUST CONTROL FOR CONSTRUCTION ACTIVITIES

Plan Number:

Other Plan/Permit Numbers:						
Owner/Operator:						
Project Name:						
				actions taken dail	ly at minimun	٦.
Date	Time	Visible Dust	Project Soils Crusted or Damp	Access Roads Crusted or Damp	Trackout Present/ Cleaned	Verification of Compliance With Dust Control Measures

Construction Site Dust Control Records are required by the Nye County Dust Control Ordinance (No. 289, Chapter 15.28). Records must be retained and made available for inspection by Nye County.

#### **ATTACHMENT 2**

# POLICY ON DUST PALLIATIVE USE IN THE PAHRUMP REGIONAL PLANNING DISTRICT, NYE COUNTY, NEVADA

# POLICY ON DUST PALLIATIVE USE IN THE PAHRUMP REGIONAL PLANNING DISTRICT, NYE COUNTY, NEVADA

Glossary of Terms and Definitions
Environmental And Regulatory Requirements
General Use Requirements
Application Guidelines - Traffic Area Applications
Application Guidelines - Non-Traffic Area Applications

#### GLOSSARY OF TERMS AND DEFINITIONS<sup>1</sup>

<u>Application rate</u> - For liquid suppressants, the volume of mixed solution (concentrate plus water) applied per unit area of land. Typical application rates range from 0.10 to 1.00 gallons of mixed solution per square yard (gallon/yd²) of land.

<u>Application rate</u> - For fibers and mulches, the mass of solids in pounds applied per unit area of land. Typical application rates range from 500 pounds per acre to 6,000 pounds per acre.

**Brine** - Solution of salt in water. Strength of brine measured by percent solids by mass. For example; a 40% magnesium chloride brine has 40 percent solids by mass.

<u>Deliquescent salts</u> - Calcium chloride and magnesium chloride salts are deliquescent (readily drawing moisture from the atmosphere and melting). Calcium chloride is available as flake or brine. Magnesium chloride is available as brine. Brine solids contents are variable.

<u>Dilution ratio</u> - The ratio of the volume of concentrate to volume of water. Example; 1:4 means 1 volume of concentrate is to be mixed with 4 volumes of water, or 100 gallons of concentrate would be mixed with 400 gallons of water.

<u>Dust Palliative</u> - A hygroscopic material, non-toxic chemical stabilizer or other dust palliative which is not prohibited for ground surface application by the EPA or the Nevada Division of Environmental Protection (NDEP) or any applicable law or regulation, as a treatment material for reducing fugitive dust emissions. Water, solutions of water and chemical surfactants, and foam are not dust palliatives for the purpose of these Ordinances.

<u>Dust Suppressant</u> - Water, hygroscopic material, solution of water and chemical surfactants, foam, non-toxic chemical stabilizer or any other dust palliative which is not prohibited for ground surface application by the EPA or the Nevada Division of Environmental Protection (NDEP) or any applicable law or regulation, as a treatment material for reducing fugitive dust emissions.

<u>Fibers/mulches</u> - Blends of wood fiber or paper mulch with binder and or tackifier in water. Fibers and mulches are usually blended on-site. Formulation types and concentrations are often proprietary and depend on soil conditions and intended use.

<u>Hygroscopic</u> - Readily drawing moisture from the atmosphere but not melting. Dry sodium chloride is hygroscopic.

<u>Lignosulfonate</u> - By-product of sulfite paper-making process. Available as 10-25 percent volumetric residual solution, as a 50 percent volumetric residual solution, or as powdered solid to be mixed with water. May have high initial BOD (biological oxygen demand).

<sup>&</sup>lt;sup>1</sup> Principal source: Bolander and Ymada, Dust Palliative Selection and Application Guide – US Department of Agriculture, November, 1999.

<u>Organic non-petroleum products</u> - Vegetable oils; typical sources include canola oil, cottonseed oil, linseed oil and soybean oil. Applied full-strength at 0.25-0.50 gallon/yd<sup>2</sup>.

<u>Organic petroleum products</u> - Available as cutback asphalt, asphalt emulsions, modified asphalt emulsions and other emulsified oils. Application rates highly variable, depending on road surface conditions, product type and dilution.

**Synthetic polymers** - By-products of adhesive manufacturing process. Available as 40-50% volumetric residual concentrate (40-60 percent solids by mass) in water, then diluted for application.

<u>Tackifier</u> - A substance used with water to hold together mulches and other dust palliatives. A tackifier binds small particles together without forming a hard crust. Many dust palliatives can be used in a dilute form as a tackifier.

**Topical** - Liquid dust suppressant application technique using a hose, spray bay or spray cannon.

<u>Windrow</u>- Method of making a temporary road surface. A 4- to 6-inch thick layer of soil is scraped off the surface. The surface is treated with dust suppressant. The windrow is scraped back onto the surface and another treatment of dust suppressant is applied. A compaction step may be necessary.

#### **ENVIRONMENTAL AND REGULATORY REQUIREMENTS**

#### **Policy Background**

The objective of this Draft Policy on Dust Palliative Use in the Pahrump Regional Planning District, Nye County, Nevada is to facilitate the implementation of fugitive dust controls in a manner that prevents human exposure to harmful constituents and protects soil and water resources while achieving Dust Control objectives. This draft policy was based on current state and federal regulations that are applicable to soil contamination, groundwater contamination, and surface water contamination. Some requirements are also incorporated based on information currently available in the scientific literature.

This policy document has been drafted to provide guidance on the use of dust palliatives and suppressants. The document lists applicable state regulations that may be applicable to the manufacture and application of dust palliatives. This interim policy includes guidelines and requirements for the use of dust palliative products based on conditions in the Pahrump Regional Planning District.

This policy document is intended to serve as a draft policy until permanent regulations can be developed based on more complete scientific data. It is envisioned that the permanent regulations will be more comprehensive in scope.

#### **Regulatory Basis For Draft Guidance**

•	NAC 445A.2272	Contamination of soil: Establishment of action levels
•	NAC 445A.22735	Contamination of groundwater: Establishment of action levels
•	NAC 445A. 2275	Contamination of surface water
•	NRS 444.8565	"Hazardous Waste" defined
•	NRS 444.861	"Used Oil" defined
•	NRS 444.8632	Compliance with federal regulations adopted by reference.
•	NRS 444.8682	Requirements for managing and disposing of mixtures of used oil and hazardous waste or other products
•	NRS 444.8683	Regulation of mixtures of used oil with wastes determined not to be hazardous
•	NRS 444.8681	Mixing of used oil with hazardous waste or products

#### **COMPLIANCE**

Application of dust palliatives may be subject to sample collection and testing for compliance with applicable regulations of the Nevada Administrative Code and the Nevada Revised Statues, and with the prohibited materials requirements and pH requirements set forth in this interim policy. Sample collection may be conducted by compliance staff of Nye County or the Nevada Division of Environmental Protection.

The requirements of this policy are applicable to Dust Control Plans submitted under the requirements of the Dust Control Ordinance (No. 289, Chapter 15.28).

#### **Prohibited Materials**

The materials and compounds listed on the following pages are not permitted in any dust suppressant product at detectable levels:

#### 1) Banned Pesticides:<sup>2</sup>

Office of Pesticide Programs

http://www.epa.gov/oppfead1/international/piclist.htm

- b) The Merck Index, eleventh edition, Merck and company, Rahway, N. J., 1989
- c) Environmental Chemistry, Manahan, S. Lewis Publisher, 1994.
- d) Hazardous Wastes, Watts, R. Wiley Intersciencee, 1997.
- e) Hazardous Waste Management, La Grega, M. McGraw Hill, 1994.

<sup>&</sup>lt;sup>2</sup> References: a) United States Environmental Protection Agency

- aldrin
- chlordane
- DDT
- DDE
- DDD
- Methoxychlor
- Dieldrin/endrin
- Heptachlor
- Hexachlorobenzene
- Lindane ((γ-BHC)
- 4. 2,3,4,5-Bis(2-butylene)tetrahydro-2- furaldehyde (Repellent-11)
- bromoxynil butyrate
- cadmium compounds
- calcium arsenate
- carbon tetrachloride
- chloranil
- chlordecone (kepone)
- chlorinated camphene [Toxaphene]
- chloromethoxypropylmercuric acetate (CPMA)
- copper arsenate
- DBCP
- 2) Severely Restricted Pesticides<sup>3</sup>
  - arsenic trioxide
  - carbofuran (granular only)
  - daminozide/alar
  - sodium arsenate
  - tributyltin compounds
- 3) Dioxins
- 4) Asbestos
- 5) PCBs

- Di(phenylmercury)dodecenylsuccinat e (PMDS)
- EPN
- ethyl hexyleneglycol (6-12)
- lead arsenate
- leptophos
- mevinphos
- mirex
- nitrofen (TOK)
- OMPA
- (octamethylpyrophosphoramide) phenylmercury acetate (PMA)
- phenylmercuric oleate (PMO)
- potassium 2,4,5-trichlorophenate (2,4,5-TCP)
- pyriminil (Vacor)
- safrole
- silvex
- sodium arsenite
- Terpene polychlorinates (Strobane)
- thallium sulfate
- vinyl chloride

Office of Pesticide Programs

http://www.epa.gov/oppfead1/international/piclist.htm

- b) The Merck Index, eleventh edition, Merck and company, Rahway, N. J., 1989
- c) Environmental Chemistry, Manahan, S. Lewis Publisher, 1994.
- d) Hazardous Wastes, Watts, R. Wiley Intersciencee, 1997.
  - e) Hazardous Waste Management, La Grega, M. McGraw Hill, 1994.

<sup>&</sup>lt;sup>3</sup> References: a) United States Environmental Protection Agency

#### pH Limits

All dust suppressant products shall have a pH value of not less than four (pH = 4) or greater than nine (pH = 9) as applied.

#### **GENERAL USE REQUIREMENTS**

#### **Open Bodies of Water and Drinking Water Well-Heads:**

Organic petroleum products, deliquescent/hygroscopic salts, and lignin-based palliatives may not be used within 20 yards of open bodies of water, including lakes, streams, and canals, or within 20 yards of a drinking water well-head. This buffer zone is intended to prevent leachate from these palliatives from reaching an open body of water or a ground water aquifer.

#### **Natural Washes and Flood Control Channels:**

Organic petroleum products, deliquescent/hygroscopic salts, and lignin-based palliatives may not be used within twenty 20 yards of any natural wash or flood control channel. This buffer zone is intended to prevent leachate from these palliatives from reaching a natural wash or flood channel, and subsequently being flushed into surface waters or drinking water supplies during a rain event.

#### **Surfactants:**

Surfactants may not contain phosphates. Surfactants by themselves are not allowed for use as a dust palliative because they do not form a durable soil surface. Non-phosphate surfactants may be combined with dust palliatives to assist penetration of dust palliatives into hydrophobic soils.

#### **Pesticide Application With Dust Palliatives:**

Any person who applies any pesticide material with a dust palliative is required to hold a valid pesticide applicators license issued by the State of Nevada.

#### **Dust Palliative Dilution and Tank Cleaning:**

Dust palliative applicators should be aware that use of water tainted with any of the above-listed prohibited or severely restricted chemicals, or with other compounds that would result in a violation of applicable codes and regulations for the dilution of dust palliatives could result in a palliative mixture that would not comply with applicable environmental regulations or the *p*H requirements for dust palliatives set forth in this policy.

Only potable water supplies or reclaimed water, meaning wastewater that, as a result of appropriate treatment, is suitable for subsequent beneficial use, may be used as a diluent for dust suppressants. Application or transport tanks that have been used for other purposes, such as pesticide use, must be cleaned in accordance with applicable regulations before being used to transport, mix, or apply a dust palliative.

#### **Traffic Area Applications:**

- 1. Fiber mulch products are not allowed for use as a dust palliative in traffic areas. These products do not hold up well for traffic use.
- 2. Use of deliquescent/hygroscopic salts are limited to magnesium chloride and only allowed for short-term (less than one year) stabilization of unpaved roads. Treated unpaved roads must be periodically maintained with additional applications of water and magnesium chloride as needed to maintain effectiveness. Magnesium chloride is not effective, even with product reapplication, for periods of more than one year.

# TABLE 1 TRAFFIC AREA APPLICATION REQUIREMENTS Appropriate Use of Liquid Dust Palliatives and Application Rates

(Traffic Area: Any land area upon which vehicular traffic is reasonably expected to occur due to location, topography or access)

Dust palliative materials must conform to all applicable Environmental / Regulatory Policies and General Use Requirements

	Regulatory Policies	and Gene	erai Us	e Requirements	5
Product Type	Use/Treatment	Dilution Range T	atio 「ypical	Application Rate gallon/yd2	Notes
Synthetic polymers: polyvinyl acetate vinyl acrylic	Topical Road or parking lot Topical Road shoulder Windrow Road surfaces	1:12-1:4 1:12-1:4 1:12-1:4	1:9 1:9 1:9	0.50 0.50 0.25/0.25/0.50	1,2,3,4
Organic petroleum products: modified & unmodified asphalt emulsions	Topical Road or parking lot Topical Road shoulder Windrow Road surfaces	1:8 1:10 1:8	1:4 1:7 1:4	0.50 0.25 0.40	1,2,3,4,5 1,2,3,4,5 1,2,3,4,5
Magnesium chloride only. Other deliquescent/ hygroscopic salts, including calcium chloride and sodium chloride are not permitted	Topical Road or parking lot Topical Road shoulder-not Allowed Windrow Road surfaces			0.50 0.25/0.25	1,2,3,4,6,8,9 1,2,3,4,6,8,9, 10 1,2,3,4,6,8,9
Fibers/Mulches	Not Allowed Unpaved Road and other Traffic Applications	Not App	plicable	Not Applicable	12
Lignin-Based Types (Lignosulfonate)	Topical Road or parking lot Topical Road shoulder Windrow Road surfaces	1:1 1:7-1:4 1:1	1:1 1:4 1:1	0.50 to 1.00 0.15 to 0.20 0.25/0.25 to 50/0.50	1,2,3,4,5 1,2,3,4,5 1,2,3,4,5
Organic non- petroleum products: animal fats, molasses/sugar beet, tall oil emulsions, vegetable oils	Topical Road or parking lot Topical Road shoulder Windrow Road surfaces	1:10 -1:2 1:10 -1:2 1:2- 1:1	1:5 1:5 1:1	1.00 1.00 0.15/0.15	1,2,3,4,5 1,2,3,4,5 1,2,3,4,5
Other	As approved by Code Enforcement Officer				

#### Non-Traffic Area Applications:

- 1. Organic petroleum products, including modified and unmodified asphalt emulsions, are not permitted on non-traffic areas. These palliatives are subject to NAC 445A.2272(b) and may discolor the land surface and produce unpleasant odors.
- 2. Deliquescent/hygroscopic salts are not allowed for non-traffic stabilization. These salts require frequent re-watering to be effective in the Pahrump Valley, are not effective for periods of more than one year, and tend to leach chlorides when precipitation occurs.
- 3. Lignin-based palliatives are not allowed for non-traffic stabilization. Surface binding action of lignin-based palliatives may be reduced or completely destroyed when heavy rains occur. The decreased binding action of these products following heavy rains renders areas treated with lignin-based palliatives vulnerable to wind erosion after rain occurs. Leachate from lignin-based palliatives may also adversely impact the quality of storm water runoff.

# TABLE 2 NON-TRAFFIC AREA APPLICATION REQUIREMENTS Appropriate Use of Liquid Dust Palliatives and Application Rates

(Non-Traffic Area: Any land area upon which no vehicular traffic is reasonably expected to occur due to site specific conditions; e.g., remoteness, fencing or other access controls)

### Dust palliative materials must conform to all applicable Environmental / Regulatory Requirements and General Use Requirements.

Product Type	Use/Treatment	Dilution Ratio Range Typical	Application Rate gallon/yd2	Notes
Synthetic polymers: Polyvinyl acetate Vinyl acrylic	Topical Vacant Land	1:12-1:4 1:9	0.50	1,2,3,4
Organic petroleum products: modified & unmodified Asphalt emulsions	Not Allowed Vacant Land	Not Applicable	Not Applicable	10
Deliquescent/ Hygroscopic salts: Magnesium chloride Brine, calcium chloride brine or flakes, sodium chloride	Not Allowed Vacant Land	Not Applicable	Not Applicable	10
Lignin-Based Types (Lignosulfonate)	Not Allowed Vacant Land	Not Applicable	Not Applicable	10
Fibers/Mulches	Topical Vacant Land	As prepared	500-6000	1,2,3,4,11
Organic non- petroleum products: animal fats, molasses/sugar beet, tall oil emulsions, vegetable oils	Topical Vacant Land	1:10-1:2 1:5	1.00	1,2,3,4,5
Other	As approved by Code Enforcement Officer			

#### **NOTES:** (See last column in preceding Application Guideline tables)

- 1. Topical application rates shown are to obtain ½ to 1 inch of penetration. Higher application rates should be used if greater penetration is needed. Windrow rate shown is to give sufficient penetration to from a 4-6 inch thick temporary travel surface.
- The dilution ratio (concentrate: water) is variable, and shall be appropriate for the intended use, and local soil and weather conditions, as proposed by the Contractor and agreed upon by the Code Enforcement Officer. Warranty conditions in Note 4 apply.
- 3. Application rate of mixed solution at the typical dilution ratio. Lifetime conditions in Note 4 apply. For windrow applications, the rates separated by slash marks indicate the first/second/third application. First application is after removal of windrow. Second application is after replacement of windrow. Third application, if needed, is after second application.
- 4. Application of diluted suppressant shall be sufficient to achieve a minimum warranted lifetime of one year from date of application.
- 5. These palliatives are subject to NAC 445A.2272(b) and may discolor the land surface and produce unpleasant odors.
- 6. Must be periodically maintained with additional applications of water and salt as needed to maintain effectiveness. Allowed only for short-term (< one year) stabilization of unpaved roads. May not be used on trafficked areas within 20 yards of a drinking water well-head, natural or artificial drainage channel or other surface water feature unless approved by the Code Enforcement Officer.</p>
- 7. Surfactants may be added to assist penetration of water and dust palliative into hydrophobic soils. Surfactants by themselves are not allowed for use as dust palliatives. Phosphates not allowed as surfactant constituents.
- 8. Brine strength may vary as supplied from manufacturer, but is typically in the range of 20-40 percent solids by mass. Maximum and minimum allowable strengths to be set by the Code Enforcement Officer.
- 9. Sodium chloride (NaCl) not allowed for any application, because it is ineffective at ambient relative humidity below 76 percent. Relative humidity above 50 percent seldom occurs in the Pahrump Valley.
- 10. Deliquescent/hygroscopic salts are not allowed for use on vacant lands or on road shoulders near surface waters or surface drainage because of adverse water quality impacts, including elevated chloride concentrations in storm water runoff and in groundwater.
- 11. Application rate in pounds per acre at the on-site blended strength.
- 12. Fiber mulches are not effective for traffic applications.

#### **ATTACHMENT 3**

# DESIGN AND POSTING OF DUST CONTROL PLAN SIGNAGE

## POLICY ON DUST CONTROL PLAN DESIGN AND POSTING OF SIGNAGE

Pursuant to Subsection 15.28.110 of the Dust Control Ordinance, Nye County has developed this policy to address questions related to the posting of informational signs on construction sites in the Pahrump Regional Planning District, Nye County, Nevada. Because this policy is referenced in the ordinance, non-compliance may result in a Notice of Violation.

The following text is excerpted from Subsection 15.28.110 for purposes of convenience:

The owner/operator will:

Install a sign on said property prior to commencing construction activity that is visible to the public and conforming to County policy on Dust Control Permit Design and Posting of Signage as described in 15.28.150, Posting of Informational Signs on Construction Sites.

In addition to the requirements listed pursuant to subsection 15.28.110, the Dust Control Plan sign shall conform to the following requirements listed pursuant to Subsection 15.28.150:

- 1. The signboard shall be constructed with materials capable of withstanding the harsh environment (e.g., strong winds, intense sunlight) of Nye County. Nye County recommends the following materials:
  - (a) 3/4" A/C laminated plywood board 2 feet by 2 feet in dimension;
  - (b) 4"x4" posts;
  - (c) Posts should be attached to the plywood board with a minimum of two (2) carriage bolts on each post; and
  - (d) The front surface of the signboard should be painted in the contrasting colors of a white background with black lettering.
- 2. The sign board shall contain the following information:
  - (e) Project name;
  - (f) Owner/Operator name;
  - (g) Telephone Number of person responsible for dust control;
  - (h) Nye County Planning Department telephone number;
  - (i) Building, site preparation, or conditional use permit number;
  - (i) Project Acreage; and
  - (k) Building, site preparation, or conditional use permit expiration date.
- 3. The signboard shall be designed to the following alpha and numeric text dimensions (sign boards written in longhand are unacceptable).

#### (a) The Nye County Ordinance provides the following example:

PROJECT NAME:	(Proj. Name)
OPERATOR:	(Your Name)
OPERATOR TELEPHONE NUMBER:	(Your Number)
NYE COUNTY— PLANNING DEPARTMENT TELEPHONE NUMBER:	(775) 751-4033
BUILDING/OTHER PERMIT NUMBERS:	(Permit Number)
DUST CONTROL PLAN NUMBER	(Plan Number)
PROJECT ACREAGE:	(Acreage)